Be #5

PCT09

RAW SEQUENCE LISTING

DATE: 06/26/2001 TIME: 08:56:43

Input Set : A:\13005 002001.TXT

PATENT APPLICATION:

Output Set: N:\CRF3\06262001\I763909.raw

US/09/763,909

ENTERED

```
4 <110> APPLICANT: Dikstein, Rivka
         Yamit-Hezi, Ayala
 7 <120> TITLE OF INVENTION: A TRANSCRIPTION FACTOR TFIID SUBUNIT,
         TAFII105, POLYPEPTIDES, DNA ENCODING THEREFOR AND
 8
         PHARMACEUTICAL COMPOSITIONS
 9
12 <130> FILE REFERENCE: 13005/002001
14 <140> CURRENT APPLICATION NUMBER: 09/763,909
15 <141> CURRENT FILING DATE: 2001-02-26
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22 <211> LENGTH: 2558
23 <212> TYPE: DNA
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29 cetgetaatt tgcagettee teeaggaace gttttgatta aaagtaacag tggteegttg
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30 atgttggtat etecteagea aactgtaaca agageegaga eeacaagtaa eataaeetea
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31 aggccagcag taccagcgaa tcctcaaaca gtcaaaatct gtacagtgcc gaactctagc
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32 tcacaattaa tcaagaaagt ggcagtgaca cctgttaaaa aattggcaca aataggaact
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33 actgtggtaa ccactgttcc gaagcettcc tcagtacaat ctgtggctgt gccaaccagt
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34 rgtcgtcaca gttactcctg gaaagccatt gaatactgta actaccctga agccttcaag
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35 tttgggagca tcatccactc cttcaaatga gcccaatctt aaagcagaga actcagcagc
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36 tgttcagatt aatctttctc cgacaatgct agaaaatgtg aagaaatgca agaacttcct
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37 tgcaatgtta ataaaactag catgtagtgg atcacagtcc cctgaaatgg ggcaaaatgt
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38 gaagaagetg gtggaacaac ttttggatge aaaaategaa geagaagaat ttactaggaa
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39 actigtatigtt gaactcaagt etteacetea geeteacetig giteetitte ttaagaaaag
                                                                          780
40 cgtggttgcc ttacgacaac ttctgcctaa ctcccagagc ttcatccagc aatgtgttca
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42 ggtgacaact acagtgtcct caagccagtc tgaaaagtca attattgttt ctggagcaac
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43 agcacccaga actgtgtcag tgcaaacttt gaacccactt gctggtccag tgggagcaaa
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44 agctggagtt gtgacacttc attctgtggg cccaactgct gcaacaggag gaacaacagc
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45 tggaactggt ttgcttcaga cttcaaaacc acttgtgaca tctgtggcaa acacagtgac
                                                                         1140
46 cacggtetea etgeaacetg aaaageeagt tgtetetgga acageagtaa caetgteeet
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47 tocagcagta acttttggag aaacttcagg tgcagctatt tgtcttccat ctgtgaaacc
                                                                         1260
48 tgttgtttcc ttctgctggg accacatctg caagcctgtt attgggactc cagttcaaat
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49 caaacttgcc cagccgggcc ctgtcctttc acaaccagct gggattccaa caggcagttc
                                                                         1380
50 aagcaagcaa ctattctcat tgtttcacgt agttcagcag ccttcaggag gcaatgaaaa
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51 acaagtgacc acaatttcac attcctcaac attgaccatt cagaaatgtg gacagaagac
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52 gatgccagtg aacaccataa tacctactag tcagtttcct ccagcttcca ttctaaagca
                                                                         1560
                                                                         1620
53 aattacetet geetggaaat aaaattetgt caetteaage ateteetaet cagaaaaata
54 gaataaaaga gaatgtaaca tcatgcttcc gagatgagga tgacatcaat gatgtgactt
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55 ctatggcagg ggtcaacctt aatgaagaaa atgcctgcat cttagcaaca aactctgaat
                                                                         1740
56 tggttggcac actcattcag tcatgtaaag atgaaccatt tctttttatt ggagctctac
                                                                         1800
57 aaaagagaat cttagacatt ggtaaaaagc atgacattac agaacttaac tctgatgctg
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58 tgaacttgat ctcccaagca acacaggaac gactacgagg ccttctagaa aaactgactg
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Input Set : A:\13005 002001.TXT

Output Set: N:\CRF3\06262001\1763909.raw

| 59 | caa | ttgc [.] | tca (| gcato | cgaa | tg ac | ctact | taca | a agg | gcaag | gtga | aaat | taca | atc o | ctgtg | rtagte | g 1980 |
|-----|-------|-------------------|-------|----------------|----------|-------|-------|-------|-------|-------|------|------|------------|--------|-------|--------|--------|
| | | | | | | | | | | | | | | | | gaaagg | |
| | | | - | | - | - | | | | - | | _ | | | _ | agato | |
| | _ | | - | | | - | - | - | - | - | | _ | | | - | cacaga | |
| | | | | | | | | | | | | | | | | igagad | |
| | | _ | | | - | | | | | | | - | - | | | cagco | |
| | _ | _ | | | _ | _ | _ | | _ | | | | - | | | cttga | |
| | | _ | | | | _ | | _ | - | | - | - | | | | cctt | |
| | _ | | | | | | | | | _ | | | _ | | | acaca | |
| | _ | | _ | | - | _ | | | | | | ataa | acaco | caa c | catga | aagag | |
| | | _ | | - | _ | ct tt | .dLLc | lacto | ; LLC | iccla | 1 L | | | | | | 2558 |
| | | | | D NO: H: 85 | | | | | | | | | | | | | |
| | | | YPE: | | <i>J</i> | | | | | | | | | | | | |
| | | | | | Ното | sap | nione | | | | | | | | | | |
| | | | | NCE: | | Jur | LCIIL | • | | | | | | | | | |
| | | | | | | Lys | Va 1 | Ala | Pro | Val | Ser | Ala | Pro | Pro | Lvs | Val | |
| 78 | 1 | | | | 5 | -1- | | | | 10 | | | | | 15 | | |
| | | Ser | Gly | Pro | | Leu | Pro | Ala | Pro | | Ile | Val | Ala | Val | | Ala | |
| 80 | | | _ | 20 | _ | | | | 25 | | | | | 30 | 4 | | |
| 81 | Pro | Asn | Thr | Thr | Thr | Ile | Gln | Phe | Pro | Ala | Asn | Leu | Gln | Leu | Pro | Pro | |
| 82 | | | 35 | | | | | 40 | | | | | 45 | | | | |
| 83 | Gly | Thr | Val | Leu | Ile | Lys | Ser | Asn | Ser | Gly | Pro | Leu | Met | Leu | Val | Ser | |
| 84 | | 50 | | | | | 55 | | | | | 60 | | | | | |
| | | Gln | Gln | Thr | Val | Thr | Arg | Ala | Glu | Thr | Thr | Ser | Asn | Ile | Thr | Ser | |
| 86 | | | | | | 70 | | | | | 75 | | | | | 80 | |
| | Arg | Pro | Ala | Val | | Ala | Asn | Pro | Gln | | Val | Lys | Ile | Cys | | Val | |
| 88 | | | | | 85 | | | | | 90 | | | _ | | 95 | | |
| | Pro | Asn | Ser | | Ser | Gln | Leu | Ile | | Lys | Val | Ala | Val | | Pro | Val | |
| 90 | _ | _ | _ | 100 | ~ 1 | ~ 1 | ~1 | m 1 | 105 | 1 | 1 | -1 | — 1 | 110 | _ | _ | |
| 91 | Lys | гÀг | | Ala | GIN | Ile | GIA | | Tnr | vaı | vaı | Thr | | vaı | Pro | Lys | |
| | Dro | Cor | 115 | Wa I | Cln | Cor | Val | 120 | Wa I | Dro | Thr | Cor | 125 | 17 a 1 | mh r | 3751 | |
| 94 | FIU | 130 | 261 | Val | GIII | Ser | 135 | нта | vai | PIO | | 140 | Val | val | 1111 | vai | |
| | Thr | | Glv | T.VC | Pro | Leu | | Thr | Va 1 | Thr | | | T.vc | Dro | Sar | Sar | |
| | 145 | 110 | Ory | цуз | 110 | 150 | non | 1111 | VUI | 1111 | 155 | пец | цуз | 110 | Ser | 160 | |
| | | Glv | Ala | Ser | Ser | Thr | Pro | Ser | Asn | Glu | | Asn | Len | Lvs | Ala | | |
| 98 | | | | 001 | 165 | | | 001 | 11011 | 170 | 110 | | LCu | 2,2 | 175 | OLU | |
| | Asn | Ser | Ala | Ala | | Gln | Ile | Asn | Leu | | Pro | Thr | Met | Leu | | Asn | |
| 100 | | | | 180 | | | | | 185 | | | | | 190 | | | |
| 101 | . Val | LLys | Lys | Cys | Lys | . Asn | Phe | Leu | Ala | Met | Leu | Ile | Lys | Leu | ı Ala | Cys | |
| 102 | | - | 195 | | - | | | 200 | | | | | 205 | | | - | |
| 103 | Sei | Gly | y Sei | Gln | Ser | Pro | Glu | Met | Gly | Gln | Asn | Val | Lys | Lys | Leu | Val | |
| 104 | | 210 |) | | | | 215 | | | | | 220 | | | | | |
| 105 | Glu | ı Glr | i Leu | ı Leu | ı Asp |) Ala | Lys | Ile | Glu | ı Ala | Glu | Glu | Ph∈ | Thr | Arg | Lys | |
| | 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| | | туг | val | . Glu | | Lys | Ser | Ser | Pro | | | His | Leu | Val | | | |
| 108 | | _ | _ | _ | 245 | | | _ | | 250 | | _ | _ | | 255 | | |
| 109 | Leu | ı Lys | Lys | Ser | · Val | . Val | Ala | Leu | Arg | Gln | Leu | Leu | Pro | Asn | Ser | Gln | |
| | | | | | | | | | | | | | | | | | |

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Input Set : A:\13005 002001.TXT
Output Set: N:\CRF3\06262001\1763909.raw

| 110 | , | | | 260 | | | | | 265 | | | | | 270 | | |
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| 111 | Ser | Phe | Ile | Gln | Gln | Cys | Val | Gln | Gln | Thr | Ser | Ser | Asp | Met | Val | Ile |
| 112 | | | 275 | | | - | | 280 | | | | | 285 | | | |
| 113 | Ala | Thr | Cys | Thr | Thr | Thr | Val | Thr | Thr | Ser | Pro | Val | Val | Thr | Thr | Thr |
| 114 | | 290 | • | | | | 295 | | | | | 300 | | | | |
| 115 | Val | Ser | Ser | Ser | Gln | Ser | Glu | Lys | Ser | Ile | Ile | Val | Ser | Gly | Ala | Thr |
| | 305 | | | | | 310 | | • | | | 315 | | | - | | 320 |
| 117 | Ala | Pro | Arq | Thr | Val | Ser | Val | Gln | Thr | Leu | Asn | Pro | Leu | Ala | Gly | Pro |
| 118 | | | _ | | 325 | | | | | 330 | | | | | 335 | |
| 119 | Val | Gly | Ala | Lys | Ala | Gly | Val | Val | Thr | Leu | His | Ser | Val | Gly | Pro | Thr |
| 120 | | - | | 340 | | _ | | | 345 | | | | | 350 | | |
| | Ala | Ala | Thr | Gly | Gly | Thr | Thr | Ala | Gly | Thr | Gly | Leu | Leu | Gln | Thr | Ser |
| 122 | | | 355 | _ | _ | | | 360 | - | | - | | 365 | | | |
| | | Pro | Leu | Val | Thr | Ser | Val | Ala | Asn | Thr | Val | Thr | Thr | Val | Ser | Leu |
| 124 | _ | 370 | | | | | 375 | | | | | 380 | | | | |
| | | Pro | Glu | Lvs | Pro | Val | Val | Ser | Glv | Thr | Ala | Val | Thr | Leu | Ser | Leu |
| | 385 | | | 4 | | 390 | | | _ | | 395 | | | | | 400 |
| | | Ala | Val | Thr | Phe | Gly | Glu | Thr | Ser | Gly | Ala | Ala | Ile | Cys | Leu | Pro |
| 128 | | | | | 405 | • | | | | 410 | | | | - | 415 | |
| 129 | Ser | Val | Lys | Pro | Val | Val | Ser | Phe | Cys | Trp | Asp | His | Ile | Cys | Lys | Pro |
| 130 | | | _ | 420 | | | | | 425 | - | - | | | 430 | - | |
| 131 | Val | Ile | Gly | Thr | Pro | Val | Gln | Ile | Lys | Leu | Ala | Gln | Pro | Gly | Pro | Val |
| 132 | | | 435 | | | | | 440 | • | | | | 445 | - | | |
| 133 | Leu | Ser | Gln | Pro | Ala | Gly | Ile | Pro | Thr | Gly | Ser | Ser | Ser | Lys | Gln | Leu |
| 134 | | 450 | | | | - | 455 | | | - | | 460 | | - | | |
| 135 | Phe | Ser | Leu | Phe | His | Val | Val | Gln | Gln | Pro | Ser | Gly | Gly | Asn | Glu | Lys |
| | 465 | | | | | 470 | | | | | 475 | _ | _ | | | 480 |
| 137 | Gln | Val | Thr | Thr | Ile | Ser | His | Ser | Ser | Thr | Leu | Thr | Ile | Gln | Lys | Cys |
| 138 | | | | | 485 | | | | | 490 | | | | | 495 | |
| 139 | Gly | Gln | Lys | Thr | Met | Pro | Val | Asn | Thr | Ile | Ile | Pro | Thr | Ser | Gln | Phe |
| 140 | | | - | 500 | | | | | 505 | | | | | 510 | | |
| 141 | Pro | Pro | Ala | Ser | Ile | Leu | Lys | Gln | Ile | Thr | Leu | Pro | Gly | Asn | Lys | Ile |
| 142 | | | 515 | | | | | 520 | | | | | 525 | | | |
| 143 | Leu | Ser | Leu | Gln | Ala | Ser | Pro | Thr | Gln | Lys | Asn | Arg | Ile | Lys | Glu | Asn |
| 144 | | 530 | | | | | 535 | | | | | 540 | | | | |
| 145 | Val | Thr | Ser | Cys | Phe | Arg | Asp | Glu | Asp | Asp | Ile | Asn | Asp | Val | Thr | Ser |
| 146 | | | | | | 550 | | | | | 555 | | | | | 560 |
| 147 | Met | Ala | Gly | Val | Asn | Leu | Asn | Glu | Glu | Asn | Ala | Cys | Ile | Leu | Ala | Thr |
| 148 | | | | | 565 | | | | | 570 | | | | | 575 | • |
| 149 | Asn | Ser | Glu | Leu | Val | Gly | Thr | Leu | Ile | Gln | Ser | Cys | Lys | Asp | Glu | Pro |
| 150 | | | | 580 | | | , | | 585 | | | | | 590 | | |
| 151 | Phe | Leu | Phe | Ile | Gly | Ala | Leu | Gln | Lys | Arg | Ile | Leu | Asp | Ile | Gly | Lys |
| 152 | | | 595 | | | | | 600 | | | | | 605 | | | |
| 153 | Lys | His | Asp | Ile | Thr | Glu | Leu | Asn | Ser | Asp | Ala | Val | Asn | Leu | Ile | Ser |
| 154 | | 610 | | | | | 615 | | | | | 620 | | | | |
| | | Ala | Thr | Gln | Glu | Arg | Leu | Arg | Gly | Leu | Leu | Glu | Lys | Leu | Thr | Ala |
| 156 | | | | | | 630 | | | | | 635 | | | | | 640 |
| | Ile | Ala | Gln | His | Arg | Met | Thr | Thr | Tyr | Lys | Ala | Ser | Glu | Asn | | Ile |
| 158 | | | | | 645 | | | | | 650 | | | | | 655 | |
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Input Set : A:\13005 002001.TXT
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| 159 160 | Leu | Cys | Ser | Asp 660 | Thr | Arg | Ser | Gln | Leu 665 | Lys | Phe | Leu | Glu | Lys 670 | Leu | Asp | | |
|------------|---|----------------|------------|------------|------------|--------|------------|------------|------------|-----------|------|------------|------------|------------|-----|------|--|----|
| 161 162 | Gln | Leu | Glu 675 | Lys | Gln | Arg | Lys | Asp 680 | Leu | Glu | Glu | Arg | Glu 685 | Met | Leu | Leu | | |
| 163 164 | | Ala 690 | Ala | Lys | Ser | Arg | Ser 695 | Asn | Lys | Glu | Asp | Pro 700 | Glu | Gln | Leu | Arg | | |
| | | Lys | Gln | Lys | Ala | | Glu | Leu | Gln | Gln | | Glu | Leu | Ala | Gln | | | |
| | 705 | **! | | | | 710 | | m1 | - 1 | -1 | 715 | - 1 | -1. | ~ 3 | _ | 720 | | |
| 167 | GIn | His | Arg | Asp | A1a 725 | Asn | Leu | Thr | Ala | 730 | Ala | Ala | He | GIY | 735 | Arg | | |
| | Lys | Lys | Arg | | Leu | Glu | Ser | Gly | | Glu | Gly | Leu | Lys | | Asn | Leu | | |
| 170 171 | LOU | Ala | Sar | 740 | Thr | Sar | Sar | Tou | 745 | λla | Thr | Tvc | Cln | 750 | Uic | λνα | | |
| 172 | пец | АГа | 755 | GIY | 1111 | Ser | Set | 760 | TIII | нта | 1111 | цуз | 765 | цец | птэ | Alg | | |
| | Pro | Arg | | Thr | Arq | Ile | Cys | | Arq | Asp | Leu | Ile | | Cys | Met | Glu | | |
| 174 | | 770 | | | - | | 775 | | | • | | 780 | | - | | | | |
| 175 | Gln | Glu | Arg | Glu | Met | _ | Tyr | Ser | Arg | Ala | | Tyr | Leu | Ala | Leu | Leu | | |
| | 785 | | | | | 790 | | | | | 795 | | | | | 800 | | |
| | Lys | Glx | Pro | Leu | | Ser | Ser | Ile | His | | Leu | Ala | Ile | Tyr | | Gln | | |
| 178 | λrα | Arg | uic | T v.c | 805 | Tou | T OII | шіс | Ctra | 810 | Clu | т10 | Cor | т1 о | 815 | C111 | | |
| 180 | Alg | AIG | птэ | 820 | Ата | ьеи | Leu | птэ | 825 | PIO | GIU | TTE | ser | 830 | ser | СТУ | | |
| | Lys | Glx | His | | His | Glu | Arq | Ala | | Phe | Thr | Ile | Arq | | Leu | Leu | | |
| 182 | - | | 835 | | | | _ | 840 | | | | | 845 | | | | | |
| 183 | Thr | Leu | Thr | Tyr | | | | | | | | | | | | | | |
| 184 | | 850 | | | | | | | | | | | | | | | | |
| | |)> SE | | | | | | | | | | | | | | | | |
| | | L> LE | | |) | | | | | | | | | | | | | |
| | | 2> TY 3> OF | | | λrti | ifici | ial (| Sogue | ngo | | | | | | | | | |
| | |)> FE | | | ALCI | LIICI | Lai | eque | ence | | | | | | | | | |
| | | ro <8 | | | RMAT | ION: | NF | B 01 | .igor | ucle | otic | le | | | | | | |
| | |)> SE | | | | | | | _ | | | | | | | | | |
| 195 | agct | tage | gga c | ettte | cgaç | gg gg | gactt | tccg | Г | | | | | | | | | 30 |
| | |)> SE | | | | | | | | | | | | | | | | |
| | | L> LE | | |) | | | | | | | | | | | | | |
| | | 2> TY | | | λrti | fici | -a 1 C | come | 200 | | | | | | | | | |
| | | 3> OF)> FE | | | ALCI | LIICI | lal S | eque | nce | | | | | | | | | |
| | | FO <8 | | | RMAT | ION: | NF | B 01 | .igor | ucle | otic | le · | | | | | | |
| | | | | | | | | | , , | | | | | | | | | |
| | 95 <400> SEQUENCE: 4 96 gatccggaaa gtcccctcgg aaagtcccta | | | | | | | | | | | 30 | | | | | | |
| | 8 <210> SEQ ID NO: 5 | | | | | | | | | | | | | | | | | |
| | 9 <211> LENGTH: 30 | | | | | | | | | | | | | | | | | |
| | 0 <212> TYPE: DNA 1 <213> ORGANISM: Artificial Sequence | | | | | | | | | | | | | | | | | |
| | 13 <220> FEATURE: | | | | | | | | | | | | | | | | | |
| | | ro <8 | | | RMAT | : NOI: | Mut | ated | NFk | B 01 | igon | nucle | eotic | le | | | | |
| | |)> SE | | | | - | | | • | _ | ٠ ر | – • | | | | | | |
| | | | | | | | | | | | | | | | | | | |

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| | 2.0 |
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| 220 <211> LENGTH: 30 | |
| 221 <212> TYPE: DNA | |
| 222 <213> ORGANISM: Artificial Sequence | |
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| 228 gatccggaaa gtagactcgg aaagtagata | 30 |

VERIFICATION SUMMARY

DATE: 06/26/2001

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Input Set : A:\13005 002001.TXT

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